

Serial No.: 10/605,598  
Confirmation No.: 2597  
Applicant: HULTÉN, Johan *et al.*  
Atty. Ref.: 00173.0043.PCUS00

**AMENDMENTS TO THE CLAIMS:**

Please amend claims 1, 2 and 5 - 12 as follows:

1. (Currently Amended) Disc brake for a heavy vehicle having an axle pressure between 6 and 14 tons, comprising a disc-shaped rotor (8) consisting of a cast iron alloy and having a radius R and a ~~calliper~~-caliper (32) supporting a brake lining (32) which is intended to be pressed against [the] said rotor (8) during braking, in which ~~the~~ said rotor (8) and brake lining (32) are arranged to absorb a brake power corresponding to a braking torque between 12 and 25 kNm and in which ~~the~~ said brake lining (32) has a radial extent B, characterized in that the ratio B/R between the radial extent B of the lining (32) and the radius R of the rotor (8) is less than 0.38.

2. (Currently Amended) Disc brake according to Claim 1, characterized in that ~~the~~ said brake lining (32) is designed to absorb a brake power corresponding to a braking torque from about amounting to 16 kNm, wherein said brake lining (32) has a radial extent of less than 70mm, to about 25 kNm, wherein ~~and in that~~ said brake lining (32) has a radial extent of less than 80 mm.

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) Disc brake according to Claim 2, ~~any of the preceding claims~~, characterized in 25 that ~~the~~ said rotor (8) is of substantially symmetrical configuration with respect to a plane running at right angles through the rotational axis and has a central bushing (12) intended for fastening to a wheel axle (6), the wear surfaces of the brake disc remaining flat when heated.

6. (Currently Amended) Disc brake according to Claim 2 ~~any of the preceding claims~~, characterized in that the radius of the rotor (8) is greater than 185 mm.

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7. (Currently Amended) Disc brake according to Claim 2, ~~any of the preceding claims~~, characterized in that the brake lining (32) is configured having a tangential modulus of elasticity  $E$  greater than 400 Mpa at a contact pressure of 2 MPa at room temperature.

8. (Currently Amended) Disc brake according to Claim 2, ~~any of the preceding claims~~, characterized in that ~~the said calliper-caliper~~ (30) supports two brake cylinders which are meant to press the brake lining against the rotor.

9. (Currently Amended) Vehicle having an axle pressure between 6 and 14 tons, comprising a disc brake having a disc-shaped rotor (8), consisting of a cast iron alloy and having a radius  $R$ , and a ~~calliper-caliper~~ (30) supporting a brake lining (32) which is intended to be pressed against ~~the said rotor~~ (32) during braking, in which ~~the said brake lining~~ (32) has a radial extent  $B$ , characterized in that the ratio  $B/R$  between the radial extent  $B$  of the lining (32) and the radius  $R$  of the rotor (8) is less than 0.38.

10. (Currently Amended) Vehicle according to Claim 9, characterized in that ~~the said axle~~ pressure amounts to between 11 and 14 tons and in that ~~the said brake lining~~ (32) has a radial extent of less than 80 mm.

11. (Currently Amended) Vehicle according to Claim 9, characterized in that ~~the said axle~~ pressure amounts to between 8.5 and 11 tons and in that ~~the said brake lining~~ (32) has a radial extent of less than 75 mm.

12. (Currently Amended) Vehicle according to Claim 9, characterized in that ~~the said axle~~ pressure amounts to between 6 and 8.5 tons and in that ~~the said brake lining~~ (32) has a radial extent of less than 70 mm.